UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

MAY 3 1 2017

Nina Bell, J.D., Executive Director
Northwest Environmental Advocates
P.O. Box 12187
Portland, Oregon 97212-0187

Re: Final Response to Petition for Rulemaking on Water Quality Criteria for Toxics in the State of Washington

Dear Ms. Bell:

The U.S. Environmental Protection Agency (EPA) is issuing this final response to your petition dated October 28, 2013, which we considered in addition to your follow up letters dated August 31, 2015, February 9, 2016, and February 21, 2017. Your petition requested that the EPA use its federal rulemaking authority under Clean Water Act (CWA) section 303(c)(4)(B) to update water quality criteria for toxics to protect human health and aquatic life in Washington. Specifically, your petition, as revised, requests that the EPA promulgate human health criteria for arsenic, thallium and dioxin, as well as update Washington's aquatic life criteria as necessary to meet the requirements of CWA section 303(c)(2)(B).

The EPA provided an interim response on May 4, 2016 notifying Northwest Environmental Advocates (NWEA) of the steps the EPA was taking towards addressing Washington's human health criteria and asking a series of follow up questions regarding Washington's aquatic life criteria. NWEA provided a response to this interim letter on February 21, 2017.

The EPA is now denying your petition based on the rationale articulated below. We do not believe that the use of federal rulemaking authority is the most effective or practical means at this time of addressing the concerns raised in NWEA's petition.

Statutory and Regulatory Background

CWA section 101(a)(2) (33 U.S.C. 1251(a)(2)) establishes as a national goal "water quality which provides for the protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water, wherever attainable." CWA section 303(c) (33 U.S.C. 1313(c)) directs states to adopt water quality standards (WQS) for their waters subject to the CWA. CWA section 303(c)(2)(A) and the EPA's implementing regulations at 40 CFR part 131 require, among other things, that a state's WQS specify appropriate designated uses of the waters, and water quality criteria that protect those uses. The EPA's regulations at 40 CFR 131.11(a)(1) provide that "[s]uch criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use."

Under the CWA, Congress gave states primary responsibility for developing and adopting WQS for their waters. It remains the EPA's strong preference to support states in their development of WQS to protect state waters rather than to promulgate federal WQS.

Under CWA section 304(a) (33 U.S.C. 1314(a)), the EPA periodically publishes criteria recommendations for states to consider when adopting water quality criteria for particular pollutants to protect the CWA section 101(a)(2) goal uses. Where the EPA has published recommended criteria, states should establish numeric water quality criteria based on the EPA's CWA section 304(a) criteria, section 304(a) criteria modified to reflect site-specific conditions, or other scientifically defensible methods (40 CFR 131.11(b)(1)). Criteria must be sufficient to protect the designated use and be based on sound scientific rationale (40 CFR 131.11(a)(1)).

CWA section 303(c)(2)(B) requires states to adopt numeric criteria for all toxic pollutants listed pursuant to CWA section 307(a)(1) (33 U.S.C. 1317(a)(1)) for which the EPA has published 304(a) criteria, where the discharge or presence of those pollutants could reasonably be expected to interfere with a state's designated uses. From the list of toxic pollutants identified pursuant to CWA section 307(a)(1), the EPA developed the Priority Pollutant List, which describes the toxic pollutants by their individual chemical names.[1] There are 126 Priority Pollutants; the EPA has section 304(a) aquatic life and/or human health criteria recommendations for 105 of those 126 pollutants.

Section 303(c)(4)(B) of the CWA authorizes the EPA Administrator to determine that a new or revised WQS is needed to meet CWA requirements. The EPA has used its discretionary authority under CWA section 303(c)(4)(B) to promulgate water quality criteria and retains its discretion to use it, as appropriate. Nonetheless, the EPA's long-standing policy, consistent with the CWA, has been that states should develop and adopt standards in the first instance.

Human Health Criteria in Washington

On August 1, 2016, the Washington State Department of Ecology (Ecology) submitted human health criteria to the EPA. On November 15, 2016, the EPA took action approving 45 human health criteria and signed a notice of final rulemaking promulgating 40 CFR 131.45 that revised 144 additional human health criteria applicable to Washington's waters, which became effective December 28, 2016. The combination of the EPA's action on Washington's submittal, and the EPA's federal rule applicable to Washington, ensures that Washington has numeric human health criteria for all priority pollutants for which 304(a) recommendations are available, consistent with CWA section 303(c)(2)(B).

The EPA disapproved the state's submitted human health criteria for arsenic, which were based on the Safe Drinking Water Act (SDWA) maximum contaminant level (MCL). In addition, the EPA took no action to approve or disapprove Ecology's human health criteria submitted for thallium and dioxin due to scientific uncertainty. Given the current uncertainty regarding aspects of the science upon which human health criteria for arsenic, dioxin, and thallium are based, the EPA did not finalize revised criteria for these three pollutants in its final rule. For those pollutants where the EPA did not approve or promulgate revised human health criteria (i.e., arsenic, dioxin and thallium), the existing criteria from the EPA's 1992 National Toxics Rule (NTR) remain in effect for CWA purposes.[2]

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[1] https://www.epa.gov/eg/toxic-and-priority-pollutants-under-clean-water-act

[2] The EPA moved Washington's existing arsenic, dioxin and thallium criteria from the NTR into 40 CFR 131.45 to have one comprehensive human health criteria rule for Washington.

As the EPA explained in its 2016 federal rule[3] and action on Washington's human health criteria,[4] the Integrated Risk Information System (IRIS) was the primary source of toxicity values (i.e., reference dose (RfD) and cancer slope factor (CSF)) for the EPA's 2015 updated CWA section 304(a) human health criteria recommendations. For thallium, the EPA's IRIS database does not currently contain an estimate of thallium's toxicity (i.e., a RfD).[5] For dioxin, IRIS does not currently contain a measure of dioxin's cancer-causing ability (i.e., a CSF).[6] Without such values, the EPA concluded that further analysis is necessary in order to promulgate scientifically sound revised criteria for these two pollutants. For arsenic, there is uncertainty surrounding the toxicological assessment with respect to human health effects. The EPA's current plan for addressing the arsenic issues is described in the *Assessment Development Plan for the Integrated Risk Information System (IRIS) Toxicological Review of Inorganic Arsenic* (EPA/630/R-14/101, November 2015). The EPA noted in the preamble to the final Washington rule (Section III, p. 85,421), that it intends to reevaluate the existing federal arsenic, dioxin and thallium human health criteria for Washington by 2018, with particular consideration of any relevant toxicity and bioaccumulation information. This timeframe is consistent with the dates outlined in a consent decree between the EPA and NWEA to address human health criteria for arsenic in Idaho, and a settlement agreement between the EPA and the Idaho Conservation League to address human health criteria for dioxin and thallium in Idaho.

At this time, the combination of the EPA's federal rule and the EPA's action on the state's submittal ensures that the human health criteria are set at levels consistent with the best available science, including local and regional information, as well as the EPA's applicable policies, guidance, and legal requirements, to protect Washington fish consumers from exposure to toxic pollutants. Since the NTR criteria for thallium, dioxin and arsenic remain in effect in Washington for CWA purposes, and additional scientific information on these three pollutants is forthcoming to inform the EPA's reevaluation by 2018, the EPA denies NWEA's petition for rulemaking for these three pollutants.

Aquatic Life Criteria in Washington

The EPA acknowledges that Ecology has not updated the majority of Washington's aquatic life criteria since the 1992 NTR and that it is important for states and tribes to review the latest science, including the EPA's national 304(a) criteria recommendations, and update criteria in a timely manner. Ecology's Strategic Plan for 2015-2020 includes commitments to update the state's aquatic life criteria.[7] However, due to the state's extensive effort to update its human health criteria and associated implementation provisions, Ecology has not yet initiated a rulemaking to adopt new and revised aquatic life criteria.

As explained above, the EPA has been working for the past several years with Ecology to support the state's adoption of human health criteria to protect fish consumers in Washington. Adoption of revised human health criteria is one of several priority actions and approaches that the EPA recommends states and tribes carry out in their WQS programs in fiscal years 2017 and 2018.[8] Other EPA-recommended priorities include assuring compliance with the EPA's new WQS regulations at 40 CFR part 131 (which Washington also did in conjunction with its human health criteria updates, with respect to variances and

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[3] https://www.gpo.gov/fdsys/pkg/FR-2016-11-28/pdf/2016-28424.pdf

[4] https://www.epa.gov/sites/production/files/2016-11/documents/epas_partial_approvalpartial_disapproval_wa_hh_wqc_impl_tools_bellon_ltr_enclosures_508c.pdf

[5] http://cfpub.epa.gov/ncea/iris/index.cfm?fuseaction=iris.showQuickView&substance_nmbr=1012.

[6] http://cfpub.epa.gov/ncea/iris/index.cfm?fuseaction=iris.showQuickView&substance_nmbr=1024.

[7] See page 11: http://www.ecy.wa.gov/programs/wq/WQStrategicPlan2015-2020.pdf

[8] See Priorities for Water Quality Standards and Criteria Programs, FY 2017-2018. U.S. EPA Office of Science and Technology. April 21, 2016. https://www.epa.gov/sites/production/files/2016-02/documents/wqs_priorities_draft_022616_508.pdf

compliance schedules); considering the EPA's most recent section 304(a) criteria for bacteria (for human health) and ammonia (for aquatic life); expanding efforts to establish numeric criteria for nutrients, biocriteria and toxics; improving online public access to EPA-approved WQS; addressing implementation as part of the WQS development process; and taking into account the EPA's guidance on downstream protection and natural conditions.

The EPA has encouraged Washington to prioritize revising its aquatic life criteria for ammonia and human health criteria for bacteria.[9] Based on preliminary conversations with the state, the EPA's understanding is that Washington intends to turn its focus to revising its bacteria criteria. Additionally, the EPA has informed Washington of the efforts of other Region 10 states and tribes who have either adopted or are seeking to adopt the EPA's section 304(a) recommended criteria for copper, the copper Biotic Ligand Model (BLM), given copper's adverse impact on salmonids, which include critically important and endangered species throughout the Pacific Northwest. To help encourage adoption of the copper BLM, the EPA held a workshop in Seattle in 2015 to discuss implementation considerations associated with the copper BLM. Washington officials attended the workshop, and the EPA expects that Washington will use information gleaned from Oregon's adoption of the BLM in 2016 and Idaho's on-going efforts to adopt the BLM to inform Washington's own adoption of the BLM. However, it is possible that in further discussions with Washington, other pollutants may emerge as higher priorities for the state. The EPA's general policy is to work with states on priority-setting in a manner that is consistent with the statutory process envisioned under CWA sections 101(b) and 303(c)(3). This approach enables the EPA and states to work in partnership to efficiently and effectively allocate resources to address pollution and accelerate state adoption of new and revised criteria.

The EPA notes that for a substantial fraction of Washington's other existing aquatic life criteria, the corresponding recently updated human health criteria are more stringent. Because waters in the state of Washington are protected for both human health and aquatic life uses, these more restrictive human health criteria are currently driving pollutant controls, and revising aquatic life criteria for the same pollutants is unlikely to result in changes to water quality. Additionally, some of Washington's existing aquatic life criteria are already more stringent than the corresponding section 304(a) recommended criteria.

For those pollutants for which Washington's aquatic life criteria may be less stringent than the corresponding aquatic life section 304(a) recommendations and for which Washington's applicable human health criteria are less stringent than its applicable aquatic life criteria, the EPA maintains that Washington should prioritize revisions to those criteria if those pollutants can be expected to interfere with the state's designated uses. In 2015, the EPA revised its implementing regulations at 40 CFR 131.20(a) to require that if states choose not to adopt new or revised criteria during their triennial review for any pollutants for which the EPA has published new or updated criteria recommendations under CWA section 304(a), they must explain their decision when reporting the results of their triennial review to the EPA under CWA section 303(c)(1) and 40 CFR 131.20(c).

NWEA noted in its petition certain biological opinions issued by the National Marine Fisheries Service (NMFS) or the U.S. Fish and Wildlife Service (FWS) for nearby states that found that the federal action of approving those state WQS for certain pollutants would cause jeopardy. NWEA points out that these opinions covered the same or similar species as are present in Washington. While the EPA agrees that the results of these consultations are potentially informative to guide Washington's prioritization of

[9] USEPA. May 16, 2014. "Re: U.S. Environmental Protection Agency 304(a) Recommendations for Ammonia and Recreational Criteria." Letter from Dan Opalski, Director of the EPA's Region 10 Office of Water and Watersheds to Heather Bartlett, Water Quality Program Manager, Washington Department of Ecology.

criteria development, these opinions are referencing assumed pollutant concentrations and species may not be currently exposed to those levels in the environment. Additionally, even in the context of NMFS and FWS evaluating a proposed federal action (not present here, since it is the petitioner that is proposing action), NMFS and FWS indicated in their biological opinions that it was reasonable to allot a certain period of time (up to 8 years, for some pollutants) for the EPA or the state to develop revised criteria.

For these reasons and the other considerations described below, the EPA denies NWEA's petition to update Washington's aquatic life criteria.

Other Considerations

NWEA's petition often cites CWA section 303(c)(2)(B) in arguing that the EPA is presumptively required to establish or revise certain aquatic life water quality criteria for priority pollutants in Washington, simply to ensure that Washington criteria match the EPA's national scientific recommendations. But petitioners misconstrue the significance of CWA section 303(c)(2)(B) to their petition (i.e., as establishing a duty for the EPA to either initiate the requested rulemaking or satisfy the petitioner that rulemaking is not warranted). While the EPA has cited CWA section 303(c)(2)(B) as authority for the EPA to make a determination under section 303(c)(4)(B) for certain priority pollutants without first collecting "water body-by-water body" evidence 65 FR 31685, 31687 (2000), in this case the petitioner nonetheless retains the burden of justifying the action sought in the petition, by demonstrating why a new or revised standard is necessary to meet the requirements of the CWA. On May 4, 2016, the EPA suggested NWEA fill several data gaps to assist the Agency in better understanding the basis for the administrative relief NWEA was seeking through its petition, and why updates to Washington's aquatic life criteria for toxics should be a higher priority than any of the other WQS program activities that the EPA recommended Washington prioritize. The EPA's questions were material to the disposition of the petition: they were meant to clarify the factual support for NWEA's contention that current water quality criteria for aquatic life are insufficient to protect Washington's designated uses. In the EPA's view, NWEA is indeed the proponent of its own petition, which includes providing the evidence to substantiate the arguments made in the petition that the EPA should exercise discretionary authority under CWA section 303(c)(4)(B). However, in its February 21, 2017, response, NWEA largely declined to do so, asserting either that the information sought was irrelevant or that it was the EPA's responsibility to fill relevant data gaps underlying NWEA's petition arguments.

In addition, the requirements of CWA section 303(c)(2)(B) have already been met for the priority pollutants for which Washington has numeric criteria. With respect to acrolein (the one priority pollutant for which Washington lacks numeric aquatic life criteria even though the EPA has developed numeric recommendations), the petition does not set forth an argument for why the discharge or presence of acrolein could reasonably be expected to interfere with Washington's designated uses. Furthermore, Washington's human health criteria for acrolein are more stringent than the EPA's national section 304(a) recommended aquatic life criteria for acrolein.

Finally, NWEA's petition refers to concerns raised by NMFS in connection with the Industrial Stormwater General Permit (ISGP). The EPA notes that NMFS commented on the ISGP that was effective 2010-2015, but neither NMFS nor FWS commented on the more recent ISGP which became effective in 2015.

Conclusion

In closing, we would like to thank you for your concerns related to human health and aquatic life toxics criteria in Washington. For the above reasons, and after careful consideration of the issues you raised and

actions you requested, the EPA is hereby denying the petition. In taking this action, the EPA is not determining that new or revised aquatic life criteria, and revised human health criteria for arsenic, dioxin and thallium are not necessary to meet CWA requirements in Washington. Rather, in this instance, the EPA is exercising its discretion to allocate its resources in a manner that supports regional and state activities to accomplish our mutual goals of protecting human health and the environment. The EPA will periodically assess Washington's progress and is not foreclosing the possibility that there may be circumstances where, despite the state's best efforts, Agency action may be appropriate, and the EPA could exercise its CWA section 303(c)(4)(B) authority. If you have any questions concerning this letter, please contact either me or Michelle Pirzadeh, Acting Regional Administrator at (206) 553-1272.

Sincerely,

Michael H. Shapiro
Acting Assistant Administrator

cc: Heather Bartlett, Washington Department of Ecology
Melissa Gildersleeve, Washington Department of Ecology